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100

110

120

Block
Library

State Flowchart
Tool

Requirements
Document

Modeling and
Simulation
Tool

Code
Generator

Code

140

130

160

170

Coverage
Report

150

Fig. 1

Fig. 2

Fig. 3A

Fig. 3B

App No.: Filed herewith
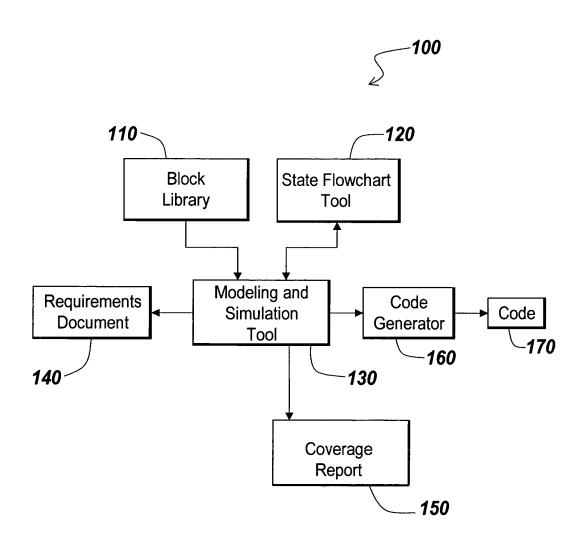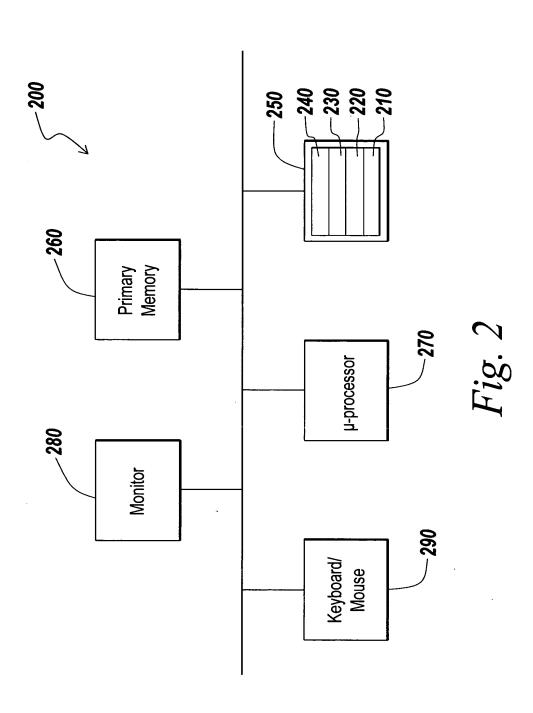Inventor: Pieter J. Mosterman
Docket No.: MWS-060
Title: Hierarchical References or...

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$$m_{12} : t_1 \rightarrow t_2$$
$$m_{21} : t_2 \rightarrow t_1$$

Fig. 3C

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Title: Hierarchical References or...

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Fig. 3D

Fig. 4A
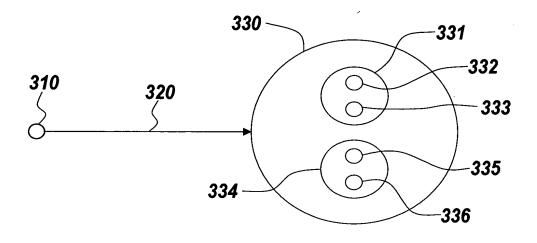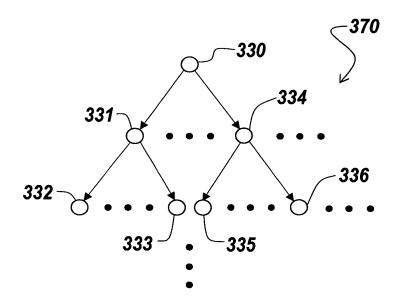

Fig. 4B

App No.: Filed herewith
Inventor: Pieter J. Mosterman
Docket No.: MWS-060
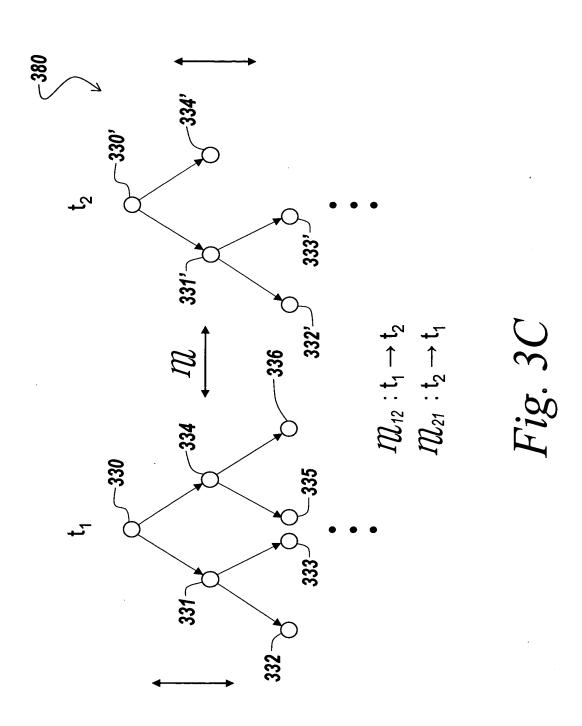Title: Hierarchical References or...

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Fig. 5A
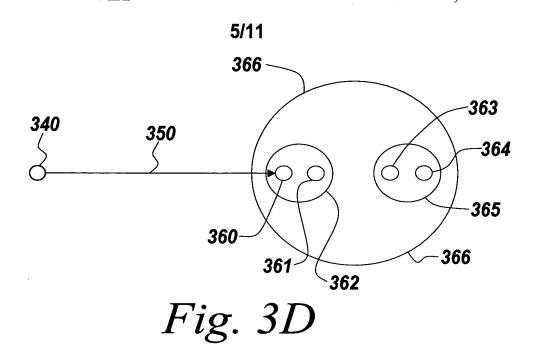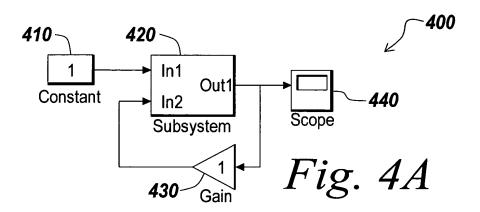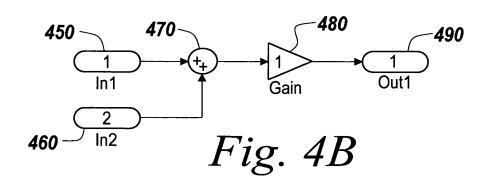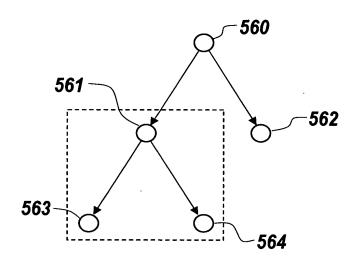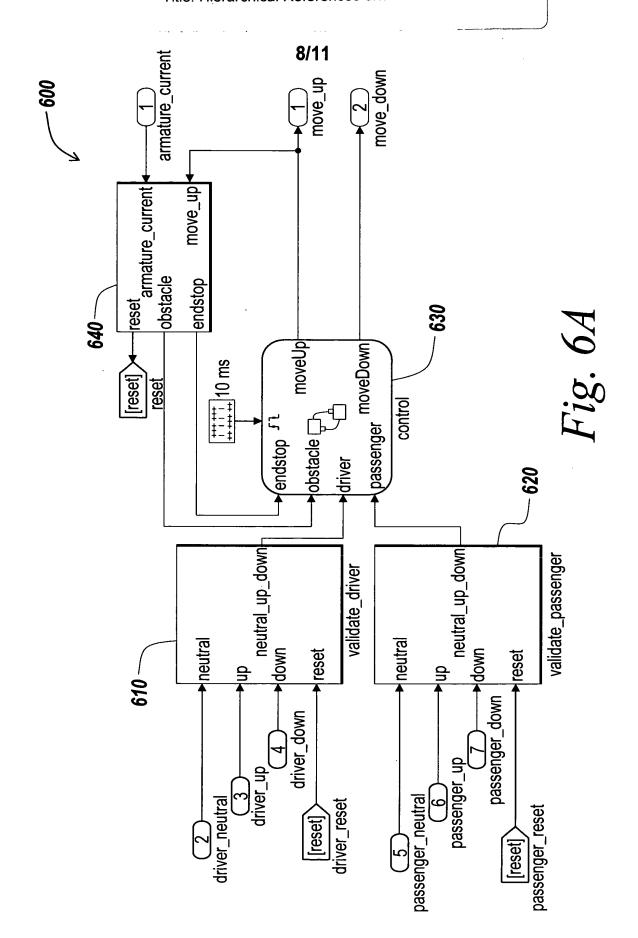
Fig. 5B

App No.: Filed herewith
Inventor: Pieter J. Mosterman
Docket No.: MWS-060
Title: Hierarchical References or...

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Fig. 6A

App No.: Filed herewith
Inventor: Pieter J. Mosterman
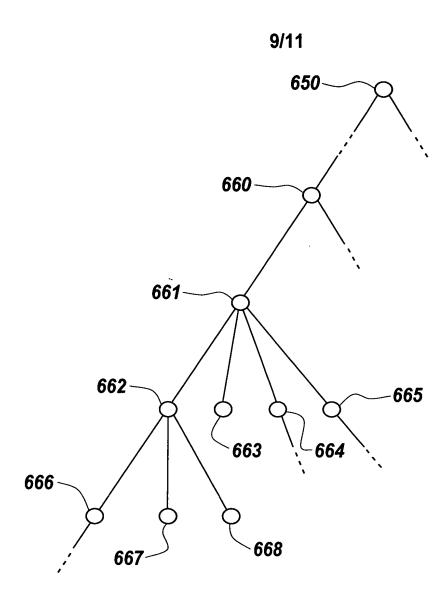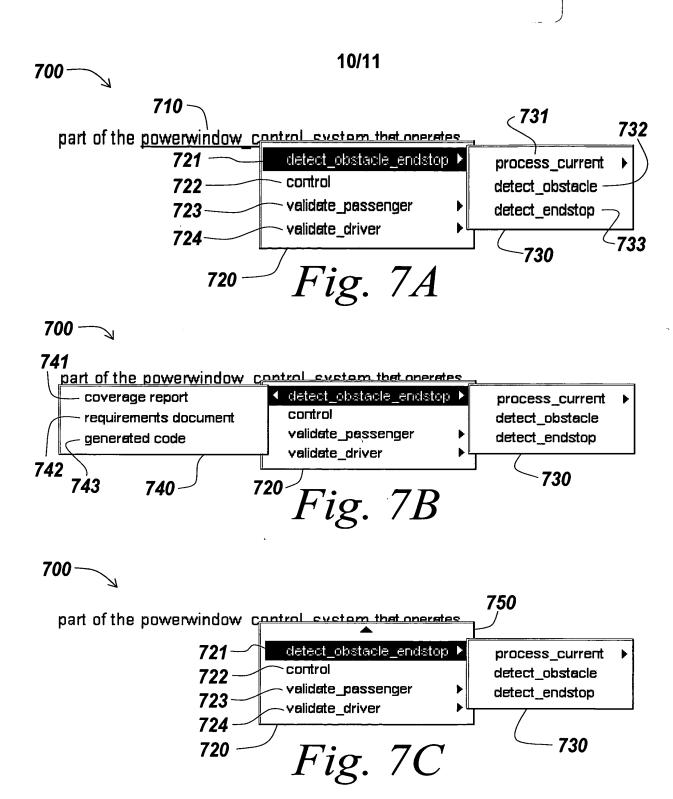Docket No.: MWS-060
Title: Hierarchical References or...

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Fig. 6B

700

710

part of the powerwindow_control_system_that_operates

721 — detect_obstacle_endstop ▶   731   732
722 — control   process_current ▶
723 — validate_passenger ▶   detect_obstacle
724 — validate_driver ▶   detect_endstop
720   730   733

Fig. 7A

700

741

part of the powerwindow_control_system_that_operates

— coverage report   ◀ detect_obstacle_endstop ▶   process_current ▶
— requirements document   control   detect_obstacle
— generated code   validate_passenger ▶   detect_endstop
742 743   740   720   validate_driver ▶   730

Fig. 7B

700

part of the powerwindow_control_system_that_operates   750

▲
721 — detect_obstacle_endstop ▶   process_current ▶
722 — control   detect_obstacle
723 — validate_passenger ▶   detect_endstop
724 — validate_driver ▶
720   730

Fig. 7C

700

part of the powerwindow control system that operates

771 ◄ Stateflow
772 ◄ SimMechanics
◄ Type is Gain

◄ powerwindow 760
detect _obstacle_endstop ►
control
validate_passenger ►
validate_driver ►

770

720

Fig. 7D